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(58) Field of search
C3T

(54) Coated paper

(57) A coated paper, in particular for foodstuff purposes, has a weight per unit area of less than 50 g/m^2 and is obtainable by coating a paper substrate with aqueous emulsions of linear polydimethylsiloxanes having reactive terminal OH groups and a proportion of silicone resin, if appropriate with the additional use of tin salts as catalysts, and subsequent drying. The paper may be used for packaging and as a pan insert for fat-free frying.

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SPECIFICATION

Coated paper and process for its production

It is the object of the invention to provide a coated paper which has diverse uses, in particular for foodstuffs, and/or can be used as a packaging paper and above all as an insert for frying and baking in pans and baking tins.

According to the invention, this is achieved by a coated paper, in particular for foodstuff purposes, which has a weight per unit area of less than 50 g/m² and is obtainable by coating a paper substrate with aqueous emulsions of linear polydimethylsiloxanes having reactive terminal OH groups and proportion of silicone resin, if appropriate with the additional use of tin salts as catalysts, and subsequent drying.

Preferably, the coated paper according to the invention has a weight per unit area of 45 g/m².

The invention also relates to a process for producing the said coated paper, which process is characterized in that a paper substrate is coated, to obtain a weight per unit area of less than 50 g/m², with aqueous emulsions of linear polydimethylsiloxanes having reactive terminal OH groups and a proportion of silicone resin, if appropriate with the additional use of tin salts as catalysts, and is subsequently dried.

During the drying process of the present process, the reactive groups of the dimethylsiloxanes undergo a condensation reaction with the silicone resins and thus form linear and crosslinked polysiloxanes on the surface of the paper

The tin salts which, if appropriate, are additionally used as catalysts in the present process are employed especially in a quantity, the order of which meets the requirements laid down by the health authority.

To produce the paper coated according to the invention, it is sufficient to apply the polysiloxane layer to one side. However, it can also be applied to both sides.

Only components which give a coating resistant to foodstuffs are used for coating.

When it is used as an insert for frying in pans, in place of fat or oil, the coated paper is distinguished in that temperatures which are up to 50% lower than those which are conventional when fat or oil is used are sufficient and a considerable saving in energy can thus be obtained, and additionally the taste of the fried food is not adversely affected in any way. Thus, the paper coated or impregnated according to the invention can be used as packaging paper for meat and, for frying the meat, the packaging paper can be placed into a pan, without additional use of fat or oil. In this case, the packaging paper is inserted, if appropriate after cutting to size, into a fat-free pan, whereupon frying can start.

In the production of the paper, the fiber materials are wet- beaten, so that high fat-resistance with simultaneous high strength of the paper is obtained. As a result, very advantageous properties in the use as an insert in frying pans are obtained.

The coated or impregnated paper adheres neither to the pan nor to the food being fried and, on fat-free frying, a calorie enrichment of the food being fried due to absorption of fat is avoided.

CLAIMS

1. Coated paper, in particular for foodstuff purposes, characterized in that it has a weight per unit area of less than 50 g/m² and is obtainable by coating or impregnating a paper substrate with an aqueous emulsion of a linear polydimethylsiloxane having reactive terminal -OH groups and a silicone resin, optionally with the additional use of a tin salt as catalyst, and subsequently drying the substrate.

2. Coated paper according to Claim 1, characterized in that it has a weight per unit area of 45 g/m².

3. Coated paper according to Claim 1 or 2, characterized in that it is made as a cut shape of a pan insert for fat-free frying.

4. Process for producing a coated paper according to Claim 1 or 2, characterized in that a paper substrate is coated or impregnated, to obtain a weight per unit area of less than 50 g/m², with aqueous emulsions of linear polydimethylsiloxanes having reactive terminal OH groups and a proportion of silicone resin, if appropriate with the additional use of tin salts as catalysts, and is subsequently dried.

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